

Utah Department of Health
Office of Epidemiology
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1. Clinician information about West Nile virus

Summary: Individuals with symptoms compatible with West Nile virus should be tested. Testing is widely available at larger reference labs.

2. Pertussis

Summary: There is increased pertussis activity in Utah. Adults can serve as reservoirs for the disease in children.

1. Clinician information about West Nile virus

How many cases are there?

- To date, no Utahns with local exposure have lab-confirmed WNV
- Two Utahns with out-of-state exposure do have lab-confirmed WNV

What are the symptoms?

- 80% will be asymptomatic
- 20% will have severe flu-like symptoms which may include rash
 - 1/150 will have severe meningitis/encephalitis symptoms
- More severe forms of the disease tend to be seen in those over the age of 50

What about testing?

- August and September are the peak months for human disease. Testing of those with severe flu-like illness or with meningitis/encephalitis is warranted.
- Testing is widely available at the larger reference labs
- If you have a hospitalized patient with meningitis or encephalitis, call your local or state health department. Based upon case criteria, testing at UDOH laboratory may be available.

What about patients with positive IgG and negative IgM?

- The WNV IgM is long lasting; people who have a negative IgM do **not** have an acute infection due to WNV.
- It is difficult to tell if they had a prior WNV exposure as some IgG tests cross-react with other flaviviruses (in other words, they may test positive if someone has had a Yellow Fever vaccine or prior dengue infection)
- If you have a high index of suspicion of WNV infection in these patients, consider retesting for IgM 2-4 weeks after onset.

2. Pertussis

Several cases of pertussis have recently been reported in children. Pertussis has significant morbidity and mortality in children. Vaccination can reduce mortality in children, however, vaccine effectiveness decreases with age, leaving older children and

adults susceptible. Adults and older children therefore can serve as a reservoir of pertussis to newborns or unvaccinated children. Pertussis is a highly infectious disease!

In children, pertussis begins with mild upper respiratory tract symptoms and can progress to severe paroxysms of cough often with a characteristic whoop, followed by vomiting. In adults, pertussis may present as prolonged bronchitis with coughing spasms severe enough to keep patients from sleeping.

If you see patients with symptoms of pertussis, PCR testing of nasopharyngeal swabs or aspirates has been found to be a rapid, sensitive, and specific method for diagnosis.

For treatment and prophylaxis, erythromycin is the drug of choice. This therapy eradicates the organism from secretions, thereby decreasing communicability and, if initiated early, may modify the course of the illness. Studies suggest that azithromycin and clarithromycin may be effective, however their efficacy is unproven.